



Online Teachers' Enrichment Workshop (TEW) on Complex Analysis & Number Theory

School of Basic Sciences, IIT Bhubaneswar

(18 – 31 December 2021)

The School of Basic Sciences, IIT Bhubaneswar in collaboration with the National Centre for Mathematics-(NCM), Mumbai is organizing a Teachers' Enrichment Workshop-(TEW) on **Complex Analysis & Number Theory** during 18 - 31 December 2021. The objective of TEW is to introduce the mathematics teachers of colleges and universities to interesting topics in the basic subjects they teach. This workshop is conceived to demonstrate the interplay between Complex Analysis and Number Theory through lectures and interactive discussion sessions, which in turn can enhance the novelty of teaching of the participants. It aims to benefit the teachers of different colleges and universities in and around Odisha. Apart from lectures there will be discussion/problem solving sessions which are designed to give participants an opportunity to solve exercises and clear their doubts. The programme is fully funded by the National Centre for Mathematics, Mumbai.

Topics to be covered

Prof. Srinivas Kotyada	Division algorithm, GCD, Euclid's algorithm, solution of linear diophantine equations, fundamental theorem of arithmetic, infinitude of primes, finding primes with a given number of digits, arithmetic modulo m , solution of congruences modulo m , Fermat's theorem, Euler's theorem and their applications.
Tarakanta Nayak	Mobius and other elementary maps, Local properties of analytic functions, Behaviour of analytic functions near singularities-removable, pole and essential, Asymptotic values, Cauchy integral formula and its consequences, Evaluation of certain real integrals, Analytic continuation

Speakers



Srinivas Kotyada is currently a Professor at the Institute of Mathematical Sciences Chennai, Tamil Nadu. His research is on Analytic Number Theory, Algebraic Number Theory & Mathematical aspects of Cryptography. He has made significant contributions to Analytic Number Theory and is active in several training programs.



Tarakanta Nayak is an Associate Professor at the School of Basic Sciences, IIT Bhubaneswar. He works on Complex dynamics and fractals. He has been active in various training and mathematics outreach programs over the past few years.

Link for Registration:

<https://www.atmschools.org/school/2021/TEW/cant/application-form>

Last date for registration: 30 November 2021

Conveners

Prof. Srinivas Kotyada

The Institute of Mathematical Sciences
IV Cross Road, CIT Campus, Taramani, Chennai
Email: ksrinivas.imsc@gmail.com

Dr. Tarakanta Nayak

School of Basic Sciences
IIT Bhubaneswar, Odisha
Email: tnayak@iitbbs.ac.in